APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,589	02/06/2006	Hiroaki Tamai	FUJZ22.365(100794-01037)	2485

26304   7590   07/17/2008
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EXAMINER
BELANI, KISHIN G

ART UNIT	PAPER NUMBER
2143	

MAIL DATE	DELIVERY MODE
07/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/567,589	TAMAI, HIROAKI
Office Action Summary	Examiner	Art Unit	
	KISHIN G. BELANI	2143	
-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --			

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 February 2006</u>.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-14</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-14</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>06 February 2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>02/06/2006, 06/30/2008</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   **Office Action Summary**   Part of Paper No./Mail Date 20080710

DETAILED ACTION

Priority

Applicant's claim to priority based on the PCT/JP03/13075 application filed on
10-10-2003 is acknowledged.

Information Disclosure Statement

The information disclosure statements submitted on 02-06-2006 and 06-30-2008
have been considered by the Examiner and made of record in the application file.

Preliminary Amendment

The present Office Action is based upon the original patent application filed on
02/06/2006 as modified by the preliminary amendments filed on 02/06/2006.

Claims 1-14 are now pending in the present application.

Specification

The title of the invention is not descriptive. The listed title is too broad (does not
limit collecting statistical information to IP packets, therefore may also, for example,
apply to students' scores on an examination). A new title is required that is clearly
indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

- On page 8 line 19, change "CAM" to -- CAM (Content Addressable Memory) --

- On page 10 line 17 and page 12 line 2, change "Ether" to – Ethernet --

- On page 11 line 28, change "80000100" to – 80001100 --

- On page 14, line 31, change "table A" to – table A-1 --

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

Claims 1-4, 7-11 and 14 are rejected under 35 U.S.C. 102(e) as being

anticipated by **Wakayama et al. (U.S. Patent Application Publication # 2004/0136368**

A1).

Consider **claim 1**, Wakayama et al. show and disclose a statistical information

extraction method (abstract which discloses a method using a packet transfer apparatus

with a statistics information collecting processor and a line card that transfers header

information of packets to the statistics information collecting processor; further

disclosing that on the basis of the statistics information collected, the setting of the

search table to be provided for the line card will be renewed; Figs. 1-2 and paragraphs

0053 and 0057 further describe the claimed method in detail), comprising:

a first step of setting a table for retrieving a pattern to which a user policy is reflected

(Table 117 shown in Fig. 3 that contains entries with specific source and destination IP

addresses used as search key to retrieve a pattern from the transmitted packets; the

search key being based on a user policy of assigning specific packets to designated line

cards as shown in Fig. 3; paragraph 0061 discloses the corresponding details, thereby

disclosing setting a table for retrieving a pattern to which a user policy is reflected);

a second step of retrieving the pattern from received packets based on the table (Fig. 2;

paragraph 0057 which discloses a received packet buffer 114, a packet processing

engine 116, a header buffer 120, and a search table 117 in which the packet processing

engine stores packet header as well as information concerning correspondence

relationship of processing of the packet, and memory 122 t store the search table 117,

thus disclosing retrieving the pattern from received packets based on the table); and

a third step of storing statistic information of the pattern retrieved (Fig. 4, that shows a

Header Information Analyzer 152, an Adder 153 for counting the number of packets

processed, and a Statistics Table 154 for storing statistics information obtained by

counting by the adder; paragraph 0062 discloses the same details).

      Consider **claim 2**, and **as applied to claim 1 above**, Wakayama et al. disclose

the claimed statistical information extraction method, wherein the first step sets in the

table whether or not the received packet should be made a learning object (Fig. 10;

paragraph 0073 which discloses that the packet processing engine 116 holds a packet counter for adding a number of packets processed by the packet processing engine 116; further disclosing that the packet processing engine increases a value P_n of the packet counter by 1, then judges whether or not the value P_n matches a predetermined integer value N (N greater than 2); if the value P_n of the packet counter is equal to N, the frame for header transfer 35 shown in Fig. 4 will be generated to transfer to the statistics information collecting processor 15, and the value P_n of the packet counter will be reset, thereby disclosing that every N^{th} packet is to be made a learning object), and the second step adds to the table a pattern unable to be retrieved if the received packet is set as the learning object in the table when the pattern is unable to be retrieved (Fig. 10; paragraph 0073 further discloses extracting packet header information and storing it in the header buffer in step 5020, if it is every N^{th} packet, which is selected as the learning object; since such selected packet is not previously stored in the table, the pattern is unable to be retrieved during the table search).

Consider **claim 3**, and **as applied to claim 1 above**, Wakayama et al. disclose the claimed statistical information extraction method, wherein the first step sets in a first table a packet type, an error type, and a pattern extraction position within a received packet corresponding to those types (Fig. 10, step 5020, that shows packet header being extracted and stored in a header buffer; Fig. 8 shows the table containing stored header information; Figs. 12-13 which show the layout of the fields that make up the Ethernet Header and the IP Header extracted and stored in the header buffer,

specifically Frame Type (packet type) field 603 in Fig. 12, and TTL (error type) and

Protocol fields in Fig. 13; the layout of fields (for example Source IP Address and

Destination IP Address) shown in Fig. 13, showing pattern extraction positions and field

lengths within a received packet header corresponding to the search parameters

(shown in Fig. 3); and

further sets in a second table a retrieval pattern corresponding to the pattern extraction

position (Fig. 3, Table 117 that shows Search Keys (Source IP Address and Destination

IP Address used as a retrieval pattern corresponding to the pattern extraction position)

stored in the table).

Consider **claim 4**, and **as applied to claim 3 above**, Wakayama et al. disclose

the claimed statistical information extraction method, wherein the first step sets the first

and the second table separately, and retrieves both tables in a partially and mutually

associated manner (Fig. 3, Search Table 117 that shows a separate second table

storing a retrieval pattern (Source IP Address, Destination IP Address) corresponding to

the pattern extraction position shown in the Header Buffer (stored in a first table shown

in Fig. 8) described in Fig. 10, step 5020, and further detailed in Fig. 13; the two tables

being set separately, but processed in a partially and mutually associated manner in

order to extract statistical information from the packets of interest; paragraph 0061

further describes the search table 117 and paragraphs 0073, 0079-0080 disclose the

details of the fields in the header buffer (Frame Type, TTL, Protocol, etc.)).

Consider **claim 7**, and **as applied to claim 1 above**, Wakayama et al. disclose the claimed statistical information extraction method, wherein the third step counts the retrieved pattern, and makes the count the statistic information (Fig. 4; paragraph 0062 which disclose the details of a Statistics Information Collecting Processor that includes an adder 153 to count number of packets retrieved, and stores the statistics information in the statistics table 154).

Consider **claim 8**, Wakayama et al. show and disclose a statistical information extraction device (abstract which discloses a packet transfer apparatus with a statistics information collecting processor and a line card that transfers header information of packets to the statistics information collecting processor; further disclosing that on the basis of the statistics information collected, the setting of the search table to be provided for the line card will be renewed; Figs. 1-2 and paragraphs 0053 and 0057 further describe the claimed device in detail), comprising:

a first means setting a table for retrieving a pattern to which a user policy is reflected (Table 117 shown in Fig. 3 that contains entries with specific source and destination IP addresses used as search key to retrieve a pattern from the transmitted packets; the search key being based on a user policy of assigning specific packets to designated line cards as shown in Fig. 3; paragraph 0061 discloses the corresponding details, thereby disclosing setting a table for retrieving a pattern to which a user policy is reflected);

a second means retrieving the pattern from received packets based on the table (Fig. 2; paragraph 0057 which discloses a received packet buffer 114, a packet processing

engine 116, a header buffer 120, and a search table 117 in which the packet processing

engine stores packet header as well as information concerning correspondence

relationship of processing of the packet, and memory 122 t store the search table 117,

thus disclosing retrieving the pattern from received packets based on the table); and

a third means storing statistic information of the pattern retrieved (Fig. 4, that shows a

Header Information Analyzer 152, an Adder 153 for counting the number of packets

processed, and a Statistics Table 154 for storing statistics information obtained by

counting by the adder; paragraph 0062 discloses the same details).

Consider **claim 9**, and **as applied to claim 8 above**, Wakayama et al. disclose

the claimed statistical information extraction device, wherein the first means sets in the

table whether or not the received packet should be made a learning object (Fig. 10;

paragraph 0073 which discloses that the packet processing engine 116 holds a packet

counter for adding a number of packets processed by the packet processing engine

116; further disclosing that the packet processing engine increases a value P_n of the

packet counter by 1, then judges whether or not the value P_n matches a predetermined

integer value N (N greater than 2); if the value P_n of the packet counter is equal to N, the

frame for header transfer 35 shown in Fig. 4 will be generated to transfer to the statistics

information collecting processor 15, and the value P_n of the packet counter will be reset,

thereby disclosing that every N^{th} packet is to be made a learning object), and

the second means adds to the table a pattern unable to be retrieved if the received

packet is set as the learning object in the table when the pattern is unable to be

retrieved (Fig. 10; paragraph 0073 further discloses extracting packet header
information and storing it in the header buffer in step 5020, if it is every N[th] packet, which
is selected as the learning object; since such selected packet is not previously stored in
the table, the pattern is unable to be retrieved during the table search).

Consider **claim 10**, and **as applied to claim 8 above**, Wakayama et al. disclose
the claimed statistical information extraction device, wherein the first means sets in a
first table a packet type, an error type, and a pattern extraction position within a
received packet corresponding to those types (Fig. 10, step 5020, that shows packet
header being extracted and stored in a header buffer; Fig. 8 shows the table containing
stored header information; Figs. 12-13 which show the layout of the fields that make up
the Ethernet Header and the IP Header extracted and stored in the header buffer,
specifically Frame Type (packet type) field 603 in Fig. 12, and TTL (error type) and
Protocol fields in Fig. 13; the layout of fields (for example Source IP Address and
Destination IP Address) shown in Fig. 13, showing pattern extraction positions and field
lengths within a received packet header corresponding to the search parameters
(shown in Fig. 3); and
further sets in a second table a retrieval pattern corresponding to the pattern extraction
position (Fig. 3, Table 117 that shows Search Keys (Source IP Address and Destination
IP Address used as a retrieval pattern corresponding to the pattern extraction position)
stored in the table).

Consider **claim 11**, and **as applied to claim 10 above**, Wakayama et al.

disclose the claimed statistical information extraction device, wherein the first means

sets the first and the second table separately, and retrieves both tables in a partially and

mutually associated manner (Fig. 3, Search Table 117 that shows a separate second

table storing a retrieval pattern (Source IP Address, Destination IP Address)

corresponding to the pattern extraction position shown in the Header Buffer (stored in a

first table shown in Fig. 8) described in Fig. 10, step 5020, and further detailed in Fig.

13; the two tables being set separately, but processed in a partially and mutually

associated manner in order to extract statistical information from the packets of interest;

paragraph 0061 further describes the search table 117 and paragraphs 0073, 0079-

0080 disclose the details of the fields in the header buffer (Frame Type, TTL, Protocol,

etc.)).

Consider **claim 14**, and **as applied to claim 8 above**, Wakayama et al. disclose

the claimed statistical information extraction device, wherein the third means counts the

retrieved pattern, and makes the count the statistic information (Fig. 4; paragraph 0062

which disclose the details of a Statistics Information Collecting Processor that includes

an adder 153 to count number of packets retrieved, and stores the statistics information

in the statistics table 154).

1.
A statistic information extraction method comprising:

a first step of setting a table for retrieving a pattern to which a user policy is reflected;
a second step of retrieving the pattern from received packets based on the table; and
a third step of storing statistic information of the pattern retrieved.

2.

The statistic information extraction method as claimed in claim 1, wherein the first step sets in the table whether or not the received packet should be made a learning object, and the second step adds to the table a pattern unable to be retrieved if the received packet is set as the learning object in the table when the pattern is unable to be retrieved.

3.

The statistic information extraction method as claimed in claim 1, wherein the first step sets in a first table a packet type, an error type, and a pattern extraction position within a received packet corresponding to those types, and further sets in a second table a retrieval pattern corresponding to the pattern extraction position.

4.

The statistic information extraction method as claimed in claim 3, wherein the first step sets the first and the second table separately, and retrieves both tables in a partially and mutually associated manner.

5.

The statistic information extraction method as claimed in claim 3, wherein only when types of the received packet correspond to both types set in the first table, the second step retrieves, from the second table, a retrieval pattern at the pattern extraction position corresponding to the both types.

6.

The statistic information extraction method as claimed in claim 5, wherein the first step sets the packet type and the error type in a hard logic, and the second step retrieves the pattern extraction position from the first table based on the packet type and the error type identified by the hard logic, and further retrieves, from the second table, the retrieval pattern corresponding to the pattern extraction position.

7.

The statistic information extraction method as claimed in claim 1, wherein the third step counts the retrieved pattern, and makes the count the statistic information.

8.

A statistic information extraction device comprising:
a first means setting a table for retrieving a pattern to which a user policy is reflected;
a second means retrieving the pattern from received packets based on the table; and
a third means storing statistic information of the pattern retrieved.

9.

The statistic information extraction device as claimed in claim 8, wherein the first means sets in the table whether or not the received packet should be made a learning object, and the second means adds to the table a pattern unable to be retrieved if the received packet is set as the learning object in the table when the pattern is unable to be retrieved.

10.

The statistic information extraction device as claimed in claim 8, wherein the first means sets in a first table a packet type, an error type, and a pattern extraction position within a received packet corresponding to those types, and further sets in a second table a retrieval pattern corresponding to the pattern extraction position.

11.

The statistic information extraction device as claimed in claim 10, wherein the first means sets the first and the second table separately, and retrieves both tables in a partially and mutually associated manner.

12.

The statistic information extraction device as claimed in claim 10, wherein only when types of the received packet correspond to both types set in the first table, the second means retrieves, from the second table, a retrieval pattern at the pattern extraction position corresponding to the both types.

13.

The statistic information extraction device as claimed in claim 12, wherein the first means further comprises a hard logic identifying the packet type and the error type, and the second means retrieves the pattern extraction position from the first table based on the packet type and the error type identified by the hard logic, and further retrieves, from the second table, the retrieval pattern corresponding to the pattern extraction position.

14.

The statistic information extraction device as claimed in claim 8, wherein the third means counts the retrieved pattern, and makes the count the statistic information.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness
   or nonobviousness.

Claims 5, 6, 12 and 13 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Wakayama et al. (U.S. Patent Application Publication #**

2004/0136368 A1) in view of **Albert et al. (U.S. Patent Publication # 6,606,316 B1).**

Consider **claim 5**, and **as applied to claim 3 above**, Wakayama et al. disclose

the claimed statistical information extraction method, wherein only when types of the

received packet correspond to both types set in the first table, the second step retrieves,

from the second table, a retrieval pattern at the pattern extraction position (Fig. 12,

paragraph 0077 which discloses packet type field 603 in the header buffer; paragraphs

0078-0080 further disclose that the upper layer protocol of a packet encapsulated in the

Ethernet header can be distinguished by the value of the type filed 603 of the Ethernet

header; further disclosing that a value of 0x0800 indicates an IP header, whereas a

value of 0x8100 represents a Tag value, a TTL field that indicates error situation when

set to 0, and a Protocol field that represents TCP protocol when set to a value of 6; any

or all of these fields can be used as search keys (see Fig. 3), such that only after the

search key values match those in the incoming packet, the second step retrieves, from

the second table, a retrieval pattern at the pattern extraction position; Paragraph 0061

describes similar details using Source IP Address and Destination IP Address as search

keys).

        However, Wakayama et al. do not specifically describe that the second step

retrieves, from the second table, a retrieval pattern at the pattern extraction position

corresponding to the both types.

        In the same field of endeavor, Albert et al. disclose the claimed method, including

retrieving a pattern at the pattern extraction position corresponding to both types (Fig. 7

table 700 that includes Information Flag 704 corresponding to IP header indicator,

Protocol field 706 indicating TCP as one of the protocol, and Time To Live (TTL) field

722 that indicates an error packet when it is set to 0; column 16, lines 26-63 and column

17, lines 35-47 describe these fields in more details; column 3, lines 57-61 disclose

fixed affinities that identify flows (a set of related packets sent between two end

stations) for which statistics are to be kept; further disclosing that for each flow that is

being serviced, the service manager can define a statistics gathering policy that is

tailored to the flow; column 7, lines 7-11 further disclose that TCP connections are

defined by a 5-tuple fixed affinity that includes the source and the destination IP

addresses, the source and the destination port numbers, and an identification of the

protocol (TCP, UDP) that applies to the packet; column 7, lines 62-67 thru column 8,

lines 1-9 further disclose using wildcard affinities to specify specific sets of flows of

interest; column 10, lines 65-67 disclosing that each wildcard affinity provides a filter

which recognizes general classes of packets of interest; column 21, lines 57-61 and

column 22, lines 13-15 also disclose the same details, thereby teaching retrieving a

pattern at the pattern extraction position corresponding to both types (using information

flag for selecting IP packet type and using TTL value for determining whether or not the

packet indicates an error packet)).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to include retrieving a pattern at the pattern extraction

position corresponding to both types, as taught by Albert et al., in the method of

Wakayama et al., so that the statistics can be collected for different categories of

packets.

Consider **claim 6**, and **as applied to claim 5 above**, Wakayama et al., as

modified by Albert et al., further disclose the claimed statistical information extraction

method, wherein the first step sets the packet type and the error type in a hard logic,

and the second step retrieves the pattern extraction position from the first table based

on the packet type and the error type identified by the hard logic, and further retrieves,

from the second table, the retrieval pattern corresponding to the pattern extraction

position (in Albert et al. reference, column 4, lines 3-10, which discloses that the

discloses invention can be implemented in either hardware (as a device) or in software

(as a set of computer instructions stored on a computer-readable medium)).

Consider **claim 12**, and **as applied to claim 10 above**, Wakayama et al.

disclose the claimed statistical information extraction device, wherein only when types

of the received packet correspond to both types set in the first table, the second means

retrieves, from the second table, a retrieval pattern at the pattern extraction position

(Fig. 12, paragraph 0077 which discloses packet type field 603 in the header buffer;

paragraphs 0078-0080 further disclose that the upper layer protocol of a packet

encapsulated in the Ethernet header can be distinguished by the value of the type filed

603 of the Ethernet header; further disclosing that a value of 0x0800 indicates an IP

header, whereas a value of 0x8100 represents a Tag value, a TTL field that indicates

error situation when set to 0, and a Protocol field that represents TCP protocol when set

to a value of 6; any or all of these fields can be used as search keys (see Fig. 3), such

that only after the search key values match those in the incoming packet, the second

step retrieves, from the second table, a retrieval pattern at the pattern extraction

position; Paragraph 0061 describes similar details using Source IP Address and

Destination IP Address as search keys).

However, Wakayama et al. do not specifically describe that the second means

retrieves, from the second table, a retrieval pattern at the pattern extraction position

corresponding to the both types.

In the same field of endeavor, Albert et al. disclose the claimed device, including

retrieving a pattern at the pattern extraction position corresponding to both types (Fig. 7

table 700 that includes Information Flag 704 corresponding to IP header indicator,

Protocol field 706 indicating TCP as one of the protocol, and Time To Live (TTL) field

722 that indicates an error packet when it is set to 0; column 16, lines 26-63 and column 17, lines 35-47 describe these fields in more details; column 3, lines 57-61 disclose fixed affinities that identify flows (a set of related packets sent between two end stations) for which statistics are to be kept; further disclosing that for each flow that is being serviced, the service manager can define a statistics gathering policy that is tailored to the flow; column 7, lines 7-11 further disclose that TCP connections are defined by a 5-tuple fixed affinity that includes the source and the destination IP addresses, the source and the destination port numbers, and an identification of the protocol (TCP, UDP) that applies to the packet; column 7, lines 62-67 thru column 8, lines 1-9 further disclose using wildcard affinities to specify specific sets of flows of interest; column 10, lines 65-67 disclosing that each wildcard affinity provides a filter which recognizes general classes of packets of interest; column 21, lines 57-61 and column 22, lines 13-15 also disclose the same details, thereby teaching retrieving a pattern at the pattern extraction position corresponding to both types (using information flag for selecting IP packet type and using TTL value for determining whether or not the packet indicates an error packet)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include retrieving a pattern at the pattern extraction position corresponding to both types, as taught by Albert et al., in the device of Wakayama et al., so that the statistics can be collected for different categories of packets.

Consider **claim 13**, and **as applied to claim 12 above**, Wakayama et al., as

modified by Albert et al., further disclose the claimed statistical information extraction

device, wherein the first step sets the packet type and the error type in a hard logic, and

the second step retrieves the pattern extraction position from the first table based on the

packet type and the error type identified by the hard logic, and further retrieves, from the

second table, the retrieval pattern corresponding to the pattern extraction position (in

Albert et al. reference, column 4, lines 3-10, which discloses that the discloses invention

can be implemented in either hardware (as a device) or in software (as a set of

computer instructions stored on a computer-readable medium)).

Conclusion

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed

to**:

> Commissioner for Patents
> P.O. Box 1450
> Alexandria, VA 22313-1450

Art Unit: 2143

Hand-delivered responses should be brought to

> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Kishin G. Belani whose telephone number is (571) 270-1768. The Examiner can normally be reached on Monday-Friday from 6:00 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Kishin G Belani/
Examiner, Art Unit 2143

July 11, 2008

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2143